Superchips 1705 MAX MicroTuner
Ford Powerstroke 7.3L Turbo Diesel Vehicles
Vehicle Programming Instructions

PLEASE READ THIS ENTIRE INSTRUCTION SHEET BEFORE YOU PROCEED

Thank you for choosing the Superchips Model 1705 MAX MicroTuner, a remarkable instrument that allows you to install one of three Superchips performance programs specifically tuned for your vehicle and your driving preferences. The 1705 MAX MicroTuner is intended for use on vehicles with unmodified stock Ford Powerstroke engines and transmissions.

Your Vehicle's STOCK Program

The MAX MicroTuner stores a copy of your vehicle's original stock computer program. Your vehicle computer must contain the manufacturer's STOCK factory program. If you have used a programmer from another aftermarket company you must use their product to return your computer back to STOCK condition before proceeding. If you have a performance enhancing chip installed, it must be removed. Other electronic performance enhancing equipment must also be removed from the vehicle.

Your Vehicle and Service Centers

If you need to return your vehicle to a service center, restore the vehicle program to its STOCK program as described below. The service center might reprogram your vehicle with an updated STOCK program without your knowledge. If your vehicle has not been returned to its STOCK program prior to service, the Superchips MAX MicroTuner will no longer be able to program your vehicle. Such a failure is not covered by the Superchips Inc. warranty.

Important Note Regarding Storage of Your MAX MicroTuner

It is recommended that you not store your MAX MicroTuner in your vehicle if ambient temperatures in your area fall 32°F. Excessively low temperatures can cause malfunction or damage to the MAX MicroTuner that is not covered by the Superchips, Inc. warranty.

Vehicle Preparation – Very Important!

Before connecting the MAX MicroTuner to your vehicle remove any accessories plugged into the cigarette lighter or accessory power ports. If an aftermarket audio system with amps is present, power to the amps must be turned off. Radio, daytime running lights and interior lights, cell phones, etc., all need to be turned off as the MAX MicroTuner needs full battery voltage to program. Ensure your vehicle battery is fully charged and not connected to a battery charger. Do not leave the MAX MicroTuner connected and unattended for any length of time to prevent unnecessary battery drain. Do not remove the programming cable during any programming

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Refund Policy

If for any reason during the first thirty (30) days after your purchase of a new Superchips product ("Product"), you may return it to the place you bought it for a full refund of the purchase price, credit or a replacement Product at the dealer's discretion. This Guarantee does not apply to products purchased from auctions nor does it apply to Products purchased used. Follow these procedures to get your refund or replacement.

1. If you are returning a MicroTuner or Flashpaq, use the MicroTuner or Flashpaq to return your vehicle to the stock settings for the vehicle. Instructions are included in the user manual.
2. Put the Product back in its original packaging.
3. Make a copy of your sales receipt. The sales receipt must be from the location where you purchased your Product and must include the name of the business, its address, and the part number or description of the applicable Superchips Product. Invoices, credit card statements, or sales receipts from an online payment service company will not be accepted.
4. Return the Product in its original packaging with a copy of the sales receipt to the place of purchase.

Superchips, Inc.
Limited Warranty

What is Covered? This warranty covers any defects in materials or workmanship in any product sold by Superchips or its affiliates through its authorized dealers ("Product"). Warranty is valid only for new products purchased through Authorized Dealers; (Proof of purchase is required for all warranty claims).

How Long Does the Coverage Last? This warranty lasts for one (1) year from the date of purchase. Coverage terminates if you sell or otherwise transfer ownership of the Product.

What will Superchips Do? Superchips will repair or replace the defective or malfunctioning Product or any defective or malfunctioning part thereof at no charge. This warranty covers parts and labor only. Superchips will reimburse you for all reasonable shipping charges within the first thirty (30) days of purchase.

What Does This Warranty Not Cover? This warranty does not cover any problem that is caused by abuse, misuse, acts of God, or improper installation or repair by non-Superchips personnel. This warranty does not cover Products purchased used nor does it apply to Products purchased from auctions or entities that are not Superchips' authorized dealers. This warranty does not cover damage to your vehicle. Use of the Product to change the performance characteristics of your vehicle could invalidate the warranty provided by the vehicle manufacturer. Consult your vehicle warranty before using the Product on your vehicle. **SUPERCHIPS SHALL NOT BE LIABLE TO YOU FOR ANY CONSEQUENTIAL, SPECIAL, OR INCIDENTAL DAMAGES. SOME STATES DO NOT ALLOW THE EXCLUSION OR LIMITATION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES, SO THE ABOVE LIMITATION OR EXCLUSION MAY NOT APPLY TO YOU.**

How Do You Get Service? If something goes wrong with your Product during the warranty period, use the following procedure to return the Product to Superchips.

1. Call Superchips' Customer Service at 1-888-227-2447 Monday through Friday from 8:00 am to 5:00 pm EST to request a Return Authorization ("RA") number.
2. Mark the outside of the shipping package with the RA number. Packages that are not marked with the RA number will be refused.
3. Make a copy of your sales receipt. The sales receipt must be from the location where you purchased your Product and must include the name of the business where you purchased the Product and the address of such business. Invoices, credit card statements, or sales receipts from an online payment service company will not be accepted.
4. Send the Product, postage paid, the copy of the sales receipt, a brief written description of the problem, and your contact information to:

Superchips, Inc.
1790 East Airport Blvd
Sanford, FL 32773
Attn: Warranty Claims

We will inspect the Product and either repair it or replace it with a new or rebuilt Product. We reserve the right to use refurbished parts when making repairs.

Your Rights Under State Law: This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

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About Maximum Trailer Weight

The manufacturer of your vehicle has specified a Maximum Trailer Weight for your vehicle. It may be found in your vehicle owner's manual.

This Superchips product is designed to increase your engine power and performance. It does not change the engine, suspension or drive train characteristics that limit the maximum trailer weight your vehicle is designed to tow. Towing trailer weights above the maximum trailer weight specified by the vehicle manufacturer may cause transmission or other damage.

If you wish to tow greater than the maximum trailer weight for your vehicle, modifications to your vehicle may need to be made. Consult your performance auto mechanic for the proper vehicle modifications.

Damage caused by towing weights greater than the maximum trailer weight specified for your vehicle shall not be the responsibility of Superchips, Inc.

1. Connecting the MAX MicroTuner to your vehicle

With the ignition switch in the OFF position, locate the diagnostic connector under the dash near the steering wheel or under the glove box and connect the MAX MicroTuner cable to the diagnostic connector. (See Figure 1)

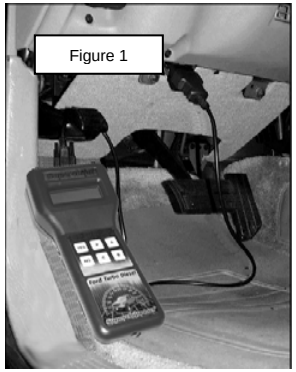
Figure 1

When connected, the MAX MicroTuner will run a self-test, displaying several start-up messages. Following the start up messages, if the MAX MicroTuner has been previously used to program a vehicle, the MicroTuner will beep and display:

MicroTuner is
VIN Locked
TOW SAFE Tuning
Is Installed
or
HI-PERF Tuning
Is Installed

This indicates the MAX MicroTuner has been previously used to program a vehicle and cannot program another. The MAX MicroTuner will continue to operate normally on the original vehicle and may be used as a DTC Reader on other Ford vehicles.

The MAX MicroTuner then displays the following message:

Begin with Ign.
OFF Press >

Insure the ignition switch is OFF, then press the '>' key on the keypad.
The MAX MicroTuner alternately displays the following messages:

Turn Ignition ON
Do NOT START Eng

Press >
to Continue…

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2. Selecting Tune Vehicle / Diagnostics

Turn the ignition switch to the ON position. Press the '>' key on the keypad. The MAX MicroTuner will beep and display the message:

A= Tune Vehicle
B= Diagnostics

Press the 'A' key on the keypad to continue with the tuning process.

Press the 'B' key to read and/or clear any Diagnostic Trouble Codes from the vehicle. See DTC Reader Instructions and DTC Interpretation in the separate manual provided for this purpose with your MAX Micro Tuner.

3. Vehicle Programming

Press the 'A' key on the keypad. The MAX MicroTuner will beep and display the messages:

Establishing
Communications

Please Wait

Turn Ignition
OFF Press >

The MAX MicroTuner is establishing communications with and identifying the vehicle computer. If the MAX MicroTuner has not yet been used to program a vehicle, no vehicle ID will be stored in the MAX MicroTuner. In such a case, the MAX MicroTuner will begin saving the STOCK program for the vehicle. If the vehicle ID matches a vehicle ID stored in the MicroTuner, the MAX MicroTuner will go directly to the *Return to Stock Sequence Section* at Step 8 that follows.

If the vehicle ID does not match a vehicle ID stored in the MicroTuner, the MAX MicroTuner will beep and display the messages:

Not the Original
Vehicle/Program

Error Type: 09 *
Call Superchips!

Press '>' to
Continue...

* Other error codes, with or without explanations may be displayed.

Pressing the '>' key will cause the MAX MicroTuner to beep and display the message:

Initialization
Please Wait...

After a few seconds the MAX MicroTuner resets and returns to the power-up self test.

4. Saving the STOCK program for the vehicle

The manufacturer's STOCK program is first saved in the MAX MicroTuner to allow the vehicle to be reprogrammed to STOCK condition if necessary. The STOCK program is saved only the first time the vehicle is programmed.

Once the MAX MicroTuner has established communications, it will beep and display:

Turn Ignition
OFF Press >

Turn the ignition to the OFF position and press the '>' key on the keypad.

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The MAX MicroTuner will beep and blink the following message for approximately 6 seconds:

Initialization..
Please Wait…

After initialization is complete, the MAX MicroTuner will beep and display the message:

Turn Ignition ON
Do NOT START Eng

Turn the ignition to the ON position. The MAX MicroTuner will beep and start saving the stock program. This will take about three minutes. The MAX MicroTuner will blink the following message:

Saving Stock

The bottom line of the display shows the progress of the stock upload.

When completed, the MAX MicroTuner checks to see if the stock program it has uploaded can be found in its internal database. If not it will display the message:

Tuner Requires
an Update…

Call Superchips!
or…

Check Vehicle
application…

Press any key to
continue...

If the stock upload is found in the internal database, the MAX MicroTuner will beep and display the message:

Please Wait…

The MAX MicroTuner is testing to see if the Passive Anti-Theft System (PATS) is active. If PATS is active, the MAX MicroTuner will beep and display the message:

Resetting PATS
Please Wait...

The MAX MicroTuner will beep and display the message:

Stock Saved!!!
Press >

5. Installing the Superchips Performance Program

The 1705 MAX MicroTuner allows for three levels of performance tuning.

Selecting the Tuning Level

The "**HI-PERF**" tuning level provides the most aggressive performance gains. This level of performance permits ***No Towing !***

> ***Caution***
> Towing while the "**HI-PERF**" tuning level is selected may cause damage to your transmission that is not covered by your vehicle warranty or the Superchips warranty.

The "**PERF TOW"** tuning level provides engine and transmission tuning enhanced for towing applications. The "**TOW SAFE**" tuning level should be selected when your vehicle is used for towing more than 6,000 lbs.

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Use the "**TOW SAFE**" tuning level if towing over 6,000 lbs. Maximum trailer weight of a stock vehicle is specified by the original manufacturer. Towing loads greater than this may cause elevated exhaust gas temperatures and may damage the vehicle. Damage caused by towing weights greater than the maximum trailer weight specified for your vehicle, or EGT in excess of 1200°F shall not be the responsibility of Superchips Inc. See the important insert regarding "Maximum Trailer Weight" in the packaging materials for your MAX MicroTuner for more information.

The MAX MicroTuner will Display the following:

Tuning Level:
xxxxxxxx

Pressing '<' and '>' on the keypad changes the tuning level setting.
Pressing 'YES' on the keypad saves the indicated tuning level setting.

If "HI-PERF" tuning is selected, the MAX MicroTuner beeps once and displays:

Towing a Trailer
YES or NO

If the 'YES' key is pressed to indicate you plan to tow with the vehicle, the MAX MicroTuner beeps and displays:

Can't Tow using
HI-PERF Tuning!

Press >
to Continue…

If "PERF TOW" tuning is selected, the MAX MicroTuner beeps once and displays:

Towing Over 6000
lbs? YES or NO

If the 'YES' key is pressed to indicate you plan to tow over 6000 lbs, the MAX MicroTuner beeps and displays:

Use Tow Safe
Only

Press >
to Continue…

Pressing '>' will then restart tuning selection.

If "HI-PERF" tuning is selected, you will not be towing, and if your vehicle's stock Speed Limiter can be raised, the MAX MicroTuner beeps and displays:

Raise SPEED LIM?
YES or NO

Pressing 'YES' raises the Speed Limiter, Pressing 'NO' keeps the stock Speed Limiter.

6. Programming Section

The MAX MicroTuner will beep and display the message:

Turn Ignition
OFF Press >

Turn the ignition to the OFF position and press the '>' key on the keypad. The MAX MicroTuner will beep and blink the following message for approximately 6 seconds:

Initialization..
Please Wait…

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After initialization is complete, the MAX MicroTuner will beep and display the message:

Turn Ignition ON
Do NOT START Eng

Turn the ignition switch ON. The MAX MicroTuner will beep and display the following messages:

Ready to Install
New TUNING

Do NOT turn OFF
the IGNITION!!!

Press >
to Continue…

Press '>'. The MAX MicroTuner will beep once and erase the present program. The MAX MicroTuner will blink the following message:

Erasing Present
Program...

IMPORTANT NOTE
Do not interrupt the MAX MicroTuner programming cycle or disconnect it from your vehicle until the programming cycle is complete. The entire programming cycle can take several minutes.

After the present program has been erased, the MAX MicroTuner will blink the message:

Install TUNING

The bottom line of the display shows the programming progress.

7. End of Programming Sequence

The programming sequence is now complete. Once the programming sequence has been successfully accomplished on a vehicle, the MAX MicroTuner becomes LOCKED to that vehicle. The MAX MicroTuner may not be used to tune any other vehicle. The MAX MicroTuner may be used on other Ford vehicles as a DTC Reader.

When the programming sequence is completed the MAX MicroTuner beeps and will display:

Please Wait…

The MAX MicroTuner is testing to see if the Passive Anti-Theft System is active. If PATS is active the MAX MicroTuner beeps and displays the message:

Resetting PATS
Please Wait...

If Returning to Stock, and PATS is not active, the MAX MicroTuner automatically clears the vehicle DTCs. The MAX MicroTuner Beeps and displays the following messages:

Clearing DTCs
Please Wait…

TUNING Installed
Turn Ign OFF

Remove the Ford
MAX Tuner…

Turn the ignition OFF and remove the cable from the diagnostic port.

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8. Return to Stock Sequence Section

The *Return to Stock Sequence* is used to reprogram a vehicle previously tuned with the Superchips MAX MicroTuner with its original stock tuning. Follow the steps described in *Connecting the Superchips MAX MicroTuner to your vehicle* Section 1. Following the typical start up messages, if the MAX MicroTuner has been previously used to program a vehicle, the MAX MicroTuner will beep and display:

MicroTuner is
VIN Locked

TOW SAFE Tuning
Is Installed
or
HI-PERF Tuning
Is Installed

This indicates the MAX MicroTuner has been previously used to program a vehicle. It should not be used to program another vehicle. The MAX MicroTuner will continue to operate normally on the original vehicle.

After establishing communications, the MAX MicroTuner will display the following message:

RETURN to STOCK?
YES or NO

If 'NO' is pressed, the MAX MicroTuner will return to *Installing the Superchips Performance Program* at Step 5 above.

If the 'YES' key is pressed when the MAX MicroTuner displays RETURN TO STOCK?, it will beep once and display the following message:

Turn Ignition
OFF Press >

Turn the ignition to the OFF position and press the '>' key on the keypad.

The MAX MicroTuner will beep and blink the following message for approximately 6 seconds:

Initialization..
Please Wait…

After initialization is complete, the MAX MicroTuner will beep and display the message:

Turn Ignition ON
Do NOT START Eng

Turn the ignition to the ON position. The MAX MicroTuner will beep and display the following messages:

Ready to RETURN
to STOCK

Do NOT turn OFF
the IGNITION!!!

Press >
to Continue…

Press '>'. The MAX MicroTuner will beep once and erase the present program. The MAX MicroTuner will blink the following message:

Erasing Present
Program...

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After the program has been erased, the MAX MicroTuner will blink the following message:

Return To STOCK

The bottom line of the display shows the programming progress.

When the programming sequence is completed the MAX MicroTuner beeps and will display:

Please Wait…

The MAX MicroTuner is testing to see if the Passive Anti-Theft System is active. If PATS is active the MAX MicroTuner beeps and displays the message:

Resetting PATS
Please Wait...

If Returning to Stock, and PATS is not active, the MAX MicroTuner automatically clears the vehicle DTCs. The MAX MicroTuner Beeps and displays the following messages:

Clearing DTCs
Please Wait…

TUNING Installed
Turn Ign OFF

Remove the Ford
MAX Tuner…

Turn the ignition OFF and remove the MAX MicroTuner cable.

No Start after Programming? Don't Panic!

In some vehicles equipped with the Passive Anti-Theft System or PATS, once the MAX MicroTuner begins saving the factory stock program, the THEFT light begins blinking rapidly and may even blink in short and long pulses to alert the user to a problem. Since the Superchips Max MicroTuner is communicating directly with the PCM, no other devices may interrupt. As a result, the PATS module flags this as an error/theft condition and goes into 'THEFT' mode. After the MAX MicroTuner has completed the programming cycle, the PCM is still fully able to communicate and appears normal. However, the vehicle may be in a No Start Condition and the THEFT light will be blinking rapidly.

Corrective Procedure for All Fords EXCEPT Diesel Excursions

This procedure should recover the vehicle and allow it to be started. Therefore, it is recommended that the MAX MicroTuner programming cycle be completed prior to recovery. i.e. The user should allow the MAX MicroTuner to upload the stock program and should select their choice of performance files and any user options, if available. Following instructions, they should complete the programming process.

Once the vehicle has been programmed with the selected performance program, complete the following steps to reset the PATS THEFT condition if necessary.

Disconnect the Superchips MAX MicroTuner & cable from the vehicle computer interface connector.

If the vehicle will not start and the Theft Light is blinking rapidly

1 Remove the Ground (-) cable from the battery post for a period of **thirty minutes** to allow the vehicle DTC codes and Theft codes to clear.
2 Re-attach the Ground cable to the battery and start the vehicle as you normally would.

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If you have a Diesel Excursion

If you have a Diesel Excursion, there is a quicker way to reset the PATS system.
THIS* ENTIRE *PROCEDURE IS CRITICAL:** Ensure this procedure is started with the **KEY COMPLETELY OUT OF IGNITION.

This technique will only work on a Ford Diesel Excursion

*1 Ensure that the key is **OUT OF THE IGNITION** to begin.*
2 Insert the key into the ignition.
*3 Turn the ignition key ON, **DO NOT START THE VEHICLE.***
4 Look at the Theft light on the dash. The Theft Light will be blinking rapidly…approx 3 blinks per second, indicating Theft.
5 After a period of 30-45 Seconds, the Theft Light will blink slowly and /or go out.
*6 Now, turn the key to the OFF position and remove it from the ignition. **DO NOT TRY TO START THE VEHICLE.***
7 Pause 10 seconds with the key out of ignition.
8 Insert the key into ignition.
*9 Turn the key ON, but **DO NOT START THE VEHICLE.***
10 Look at the Theft light on the dash. The Theft Light will be blinking slowly…1 blink per second (normal mode).
11 After the Wait to Start light goes out, the customer can then crank and start the vehicle normally.

Error Notification

In the event the programming cycle is interrupted, the MAX MicroTuner is designed to recover automatically. Follow the on-screen prompts. If for any reason the MAX MicroTuner fails to complete its programming cycle, an error message will be displayed on the unit. Please make note of the message displayed and contact Superchips Customer Service. If you need assistance please contact your local dealer or call Superchips Customer Service at 407-585-7000 M-F 8:00AM till 5:00 PM. EST

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If it is necessary to return your Microtuner to Superchips, please take a moment and fill out this form. the following information will be necessary to process your request.

Check list:

☐ Complete this form and have it available when you contact Superchips.

☐ Contact Superchips Customer Service @ 407.585.7000 to obtain an RA number.

☐ If an RA number has been issued, enter the RA number on the bottom of this form.

☐ Attach a photocopy of your purchase receipt to this form.

☐ Attach this form to the product being returned to Superchips.

Name:_____

Street Address: _____

City: _____ **State**: _____ **Zip**: _____

Home Phone:_____ **Other phone**: _____

Place of purchase: _____

Date of Purchase: _____

Vehicle Year: _____ **Vehicle Make**: _____

Vehicle Model: _____

VIN Number: _____

Transmission: ☐ **Automatic** ☐ **Manual**

Tuner model: _____

Serial number on back of Microtuner: _____

E-mail address: _____

RA Number:_____

Prior to returning any product to Superchips, you must obtain an RA number; please contact Superchips customer service at 407.585.7000.

Please attach a photocopy of sales receipt here.

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